### Legal Alliance to Stop Geoengineering (LASG)

#### **CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

July 25, 2016

Re: Notice of Intent to File Citizens' Suits Pursuant to Federal Clean Water Act and Federal Safe Drinking Water Act

#### RESERVATION OF RIGHTS

Proposed Plaintiffs intend to commence civil actions following sixty days' notice to prosecute the incidents and similar or related violations stated herein, including all violations that occur or continue to occur after service of this notice and all other violations revealed in the course of the discovery process. We reserve the right to modify the descriptions of the incidents set forth in this letter either upon the commencement of the civil actions or afterwards, depending upon disclosures and other revelations that may occur in the course of the litigation discovery process.

WARNING: NOTICE OF DUTY TO SEARCH FOR, PRESERVE AND PREVENT SPOLIATION AND DESTRUCTION OF ALL RECORDS, DOCUMENTATION, INFORMATION, WRITINGS AND POTENTIAL EVIDENCE UNDER THE FEDERAL RULES OF CIVIL PROCEDURE, IN ALL FORMS INCLUDING PHYSICAL, ELECTRONIC AND ANY OTHER MEDIA, DUE TO ANTICIPATION OF LITIGATION

Pursuant to the Federal Rules of Civil Procedure, all Proposed Defendants including Violators and Delinquent Regulators as hereinafter listed, are directed and notified to search for, preserve and prevent destruction of all potential evidence or information likely to lead to the discovery of evidence, including all records, documents, information and writings, in all forms both physical and electronic and any other media, REGARDLESS OF ANY POLICIES OF RECORD RETENTION AND DESTRUCTION FOR NORMAL BUSINESS/OPERATING FUNCTIONS AND ACTIVITIES.

To Violators and Delinquent Regulators (collectively, "Proposed Defendants"):

#### Violators:

Ashton B. Carter Secretary of Defense United States Department of Defense 1000 Defense Pentagon Washington, DC 20301-1000

General Mark A. Welsh III Chief of Staff of the United States Air Force 1690 Air Force Pentagon Washington, DC 20330-1670 Admiral John M. Richardson Chief of Naval Operations United States Navy 1200 Navy Pentagon Washington DC 20350-1200

Michael Huerta
Administrator of the United States Federal Aviation Administration
U.S. Department of Transportation
Federal Aviation Administration
800 Independence Avenue, S.W.
Washington, DC 20591

Maj. Gen. Charles Frank Bolden, Jr. Administrator of the National Aeronautics and Space Administration NASA Headquarters 300 E. Street S.W., Suite 5R30 Washington DC 20546-0001

Louis W. Uccellini, Director National Weather Service Organization 1325 East West Highway Silver Spring, MD 20910

Dr. Kathryn Sullivan, Administrator National Oceanic and Atmospheric Administration 1401 Constitution Avenue N.W., Room 5128 Washington, DC 20230

Board of Supervisors Placer County 3091 County Center Drive, Suite 180 Auburn, CA 95603

Board of Directors Placer County Water Agency 144 Ferguson Road Auburn, CA 95603

Shasta County Board of Supervisors 1450 Court Street, #308B Redding, CA 96001 Board of Supervisors Santa Cruz County Office of the Clerk 70 West Hedding Street 10<sup>th</sup> Floor, East Wing San Jose, CA 95110

Board of Supervisors Siskiyou County 1312 Fairlane Road Yreka, CA 96097

Mayor Missy McArthur City of Redding City Council P. O. Box 496071 Redding, CA 96049-6071

Mayor Missy McArthur City of Redding 777 Cypress Avenue Third Floor Redding, CA 96001

Mayor William Kirby, M.D. City of Auburn City Hall 1225 Lincoln Way Auburn, CA 95603

Jonathan Oldham, Environmental Compliance Manager City of Redding Environmental Management Public Works Department P.O. Box 496071 Redding, CA 96049-6071

Jon McClain, Assistant Director of Public Works-Utilities City of Redding Public Works Public Works Department P.O. Box 496071 Redding, CA 96049-6071

#### **Delinquent Regulators:**

Gina McCarthy, Administrator US Environmental Protection Agency 1200 Pennsylvania Avenue, N.W. (MC-1101A) Washington, DC 20460 Alexis Strauss, Acting Regional Administrator US EPA Region 9 75 Hawthorne Street San Francisco, CA 94105

Admiral Paul F. Zukunft, Commandant US Coast Guard 2703 Martin Luther King Jr. Avenue S.E. Washington, DC 20593-7000

Felicia Marcus, Chair, State Water Resources (Quality) Control Board State Water Resources Control Board State of California P.O. Box 100 Sacramento, CA 95812-0100

Central Valley Regional Water Resources (Quality) Control Board, Region 5 11020 Sun Center Drive, Suite 200 Rancho Cordova, CA 95670

Karl E. Longley, Chair Central Valley Regional Water Resources (Quality) Control Board, Region 5 Fresno Office 1685 "E" Street Fresno, CA 93706-2007

Pamela Creedon, Executive Officer Central Valley Regional Water Resources (Quality) Control Board, Region 5 Redding Office 364 Knollcrest Drive, Suite 205 Redding, CA 96002

John M. Robertson, Executive Director Central Coast Regional Water Resources (Quality) Control Board, Region 3 895 Aerovista Place, Suite 101 San Luis Obispo, CA 93401

Matthias St. John, Executive Director North Coast Regional Water Resources (Quality) Control Board, Region 1 5550 Skylane Blvd., Suite A Santa Rosa, CA 95403

Patty Z. Kouyoumdjian, Executive Officer Lahontan Regional Water Resources (Quality) Control Board, Region 6 2501 Lake Tahoe Blvd. South Lake Tahoe, CA 96150 California State Water Resources Control Board Division of Drinking Water Headquarters Office 1001 "I" Street - 24<sup>th</sup> Floor Sacramento, CA 95814

#### Michael McNamara

District 02 – Lassen Branch District; Northern California Field Operations Branch California Division of Drinking Water, State Water Resources Control Board 364 Knoll Crest Drive, Suite 101 Redding, CA 96002

#### Bruce Burton

California Field Operations Branch California Division of Drinking Water, State Water Resources Control Board Northern 50 "D" Street, Suite 200 Santa Rosa, CA 95404

#### Richard Hinrichs

Region I – California Field Operations Branch California Division of Drinking Water, State Water Resources Control Board Northern 364 Knollcrest Drive, Suite 101 Redding, CA 96002

#### Stefan Cajina

Region II – California Field Operations Branch
California Division of Drinking Water, State Water Resources Control Board Northern
850 Marina Bay Parkway, Bldg. P – Second Floor
Richmond, CA 94804

#### Barry Sutter

District 01 Klamath – Northern California Field Operations Branch California Division of Drinking Water, State Water Resources Control Board 364 Knollcrest Drive, Suite 101 Redding, CA 96002

#### Jan Sweigert

District 05 – Monterey - Northern California Field Operations Branch California Division of Drinking Water, State Water Resources Control Board 1 Lower Ragsdale Drive, Bldg. 1, Suite 120 Monterey, CA 93940

#### Notice is also given to:

Loretta E. Lynch Attorney General of the United States US Department of Justice 950 Pennsylvania Avenue, N.W. Washington, DC 20530-0001 Kamala D. Harris Attorney General of the State of California Office of the Attorney General 1300 "I" Street Sacramento, CA 95814-2919

#### To the Proposed Defendants:

The undersigned attorneys represent Proposed Plaintiffs (listed below) and complain under the statutory "citizens' suit" provisions of the federal Clean Water Act, §505(a), 33 U.S.C. §1365(a) et seq. (CWA), and Safe Drinking Water Act, §1449(a)(1), 42 U.S.C. 300f et seq. (SDWA) (collectively, as amended, the "Statutes") of past and continuing violations of the Statutes by Proposed Defendants (listed below) in the State of California, including, without limitation, Shasta, Placer, Siskiyou and Santa Cruz Counties. Upon the expiration of the 60-day statutory waiting period required under both Statutes, and in the absence of adequate remedial effort by Proposed Defendants, Proposed Plaintiffs will file one or more citizens' suits in the United States District Court for the State of California under the applicable provisions of the Statutes, as follows:

#### A. PRELIMINARY STATEMENT

In this time of disclosure, the citizens of this nation – indeed, of this planet – deserve to know the nature and extent of the aerosol spraying programs ("Programs") occurring in the skies over California and its waters (both coastal and inland), as well as across this country and beyond its borders. These Programs include so-called "solar radiation management" (SRM), "stratospheric aerosol geoengineering" (SAG) and "stratospheric aerosol injection" (SAI) programs, as well as other aerosol spraying programs being conducted by various entities, including, but not limited to, the US government and its contractors and affiliates. Beyond the fictional defense that "it's not happening" and that the artificial clouds are "just persistent contrails" from commercial aircraft, the actual Programs are releasing nano-particulates of toxic materials, including, but not limited to, aluminum oxide, barium, and strontium, into the atmosphere at high levels in the dubious effort to impact the climate or for other reasons unknown. CIA Director John Brennan confirmed on June 29, 2016, that SAI Programs are anything but fiction. Based on the law of gravity, such toxic dispersions are coming down to ground-level waters, and contaminating our air, soil and water. The resulting damage to our environment and human health is widespread.

There is no "pharmaceutical fix" to climate change and global warming. As Albert Einstein said: "We can not solve our problems with the same level of thinking that created them." We deserve answers from the groups releasing toxic chemicals in the skies, as well as from those who have turned a blind eye to the Programs, in violation of our environmental and human rights laws. President Abraham Lincoln said: "I am a firm believer in the people. If given the truth, they can be depended upon to meet any national crisis. The great point is to bring them the real facts."

The Programs are occurring without legal permits, scientific justification, or public comment or debate. While such Programs violate a broad spectrum of state and

federal environmental and other laws, rules, and regulations, this 60-Day Notice and prospective federal lawsuits focus on violations of the federal Clean Water Act and the Safe Drinking Water Act arising out of the contamination of the California water supply in Shasta, Placer, Siskiyou and Santa Cruz Counties, including the Sacramento Delta, which impacts the majority of California's drinking water supply. Such violations impose strict liability on the parties involved in the non-permitted Programs, as well as mandatory obligations on the regulatory agencies and municipalities authorized to prevent such Programs.

The Proposed Plaintiffs consist of the following:

- Environmental Voices
   Deborah Whitman, President
   P.O. Box 1953
   Rocklin, CA 95677
   916-595-7197
- Dane Wigington
   GeoengineeringWatch.org
   P.O. Box 9
   Bella Vista, CA 96008
   530-472-3284
- Beth Brennema
   P.O. Box 781
   Laytonville, CA 95454
   650-544-6969
- 4. Lori Bridgeford 2304 California Street Redding, CA 96001-2611 530-247-3925
- 5. Allan Buckman 1420 Tubbs Lane Calistoga, CA 94515 707-591-3445
- 6. Kat Canto 2129 Hacienda Street Redding, CA 96003 530-223-3385
- 7. Curt Christenson 12106 Oak Leaf Lane Redding, CA 96003 530-244-4145

- Victoria Cooley
   20422 Helena Oaks Lane
   Redding, CA 96003
   530-351-3214
- Damon Cook
   1124 Peregrine Way
   Redding, CA 96003
   916-666-1358
- Ariel Curtis
   302 Fourth Street, #328
   San Rafael, CA 94901
   415-505-4970
- 11. Lisa Ewing P.O. Box 402 Igo, CA 96047 530-262-0307
- 12. Ron Kauk P.O. Box 148 Yosemite, CA 95389 209-409-2524
- Frank P. Livolsi, M.D.
   P.O. Box 1339
   Anderson, CA 96007
   530-227-0536
- 14. Francis Mangels 736 Pine Ridge Avenue Mt. Shasta, CA 96067 530-926-0311
- Eric Paulson
   3741 Greenwood Heights Drive
   Kneeland, CA 95549
   707-845-6456
- 16. Bonnie Roberts 22379 Reno Avenue Gerber, CA 96035 530-385-1054

- 17. Anoosheh Robertson 5301 Maui Way Fair Oaks, CA 95628 916-862-6894
- Robert Rubin
   2911 Lethbridge Court
   Pleasanton, CA 94588
   925-216-8833
- Brian Schuler
   5701 Pride Road
   Forestville, CA 95436
   707-328-3837
- Wendy Sher
   110 Skyline Blvd.
   Oroville, CA 95966
   530-228-6416
- 21. Leroy Simpson 1640 East Cypress, Suite A Redding, CA 96002 530-941-3641
- 22. Sean Slavin 1563 Laguna Road Santa Rosa, CA 95401 707-892-3238
- 23. Erin Pearl Smith 10688 Lazy Valley Road Penn Valley, CA 95946 530-613-6519
- 24. Mark Steiner 6415 Oxbow Street Redding, CA 96001 707-478-4870
- 25. Keri Strisower 3128 Begonia Street Anderson, CA 96007 530-521-0126
- 26. Phillip Andrew Wilkins 10688 Lazy Valley Road Penn Valley, CA 95946 530-813-0454

- 27. Jacqueline Wong 2606 East Muncie Avenue Fresno, CA 93720 209-607-5408
- 28. Diana Woodley 1321 Oregon Avenue Shasta Lake City, CA 96019 530-921-4822
- Joy and Hugh Brown P.O. Box 1108 Greenville, CA 95947 530-284-1401

The Proposed Plaintiffs are citizens who have been harmed and have interests that have been adversely affected as described in Section K below, entitled: INJURIES TO PUBLIC HEALTH AND THE ENVIRONMENT CAUSED BY VIOLATIONS OF THE CWA AND THE SDWA. Furthermore, Plaintiffs include additional citizens who are members of, and affiliated with, Environmental Voices. Environmental Voices is a non-profit organization organized under the laws of the State of California, dedicated to securing healthy air, land and water for all who call California home. Environmental Voices has members throughout the State of California and the United States. These members live, work, and/or recreate within, or downstream from, the above-named waters of the US and areas draining into said waters, and utilize such waters for drinking and other uses. Accordingly, Proposed Plaintiffs, including Environmental Voices, are "persons" (i.e., "citizens") within the meaning of Section 505(g) of the CWA and Section 1449 of the SDWA, and thus have standing to bring the suits noticed herein.

The Proposed Defendants consist of the following two groups, the Violators and the Delinquent Regulators:

The Violators presently consist of the National Oceanic and Atmospheric Administration (NOAA); the National Weather Service (NWS); the National Aeronautics and Space Administration (NASA); the Department of Defense (DoD), including the US Air Force (USAF) and US Navy (USN); the US Coast Guard (USCG); the Federal Aviation Administration (FAA); Placer County; Placer County Water Agency; Shasta County; Santa Cruz County; Siskiyou County; City of Redding; City of Auburn; City of Redding Environmental Management; City of Redding Public Works.

The Delinquent Regulators consist of the Environmental Protection Agency (EPA); Environmental Protection Agency, Region 9 (EPA R-9); California Water Resources Control Board (CWRCB); California Regional Water Resources (Quality) Control Boards for Central Valley (Region 5), North Coast (Region 1), Lahontan (Region 6) and Central Coast (Region 3); the California State Water Resources (Quality) Control Board (SWRCB) and the California Division of Drinking Water.

- B. PROPOSED DEFENDANTS AND THEIR INVOLVEMENT (THROUGH ACTS AND LIMITED TO, SUCH PROGRAMS AS SOLAR RADIATION MANAGEMENT (SRM), SOLAR AEROSOLIZATION GEOENGINEERING (SAG) AND STRATOSPHERIC AEROSOL INJECTION (SAI) PROGRAMS IN CALIFORNIA IN VIOLATION OF THE FEDERAL CLEAN WATER ACT (CWA) AND THE FEDERAL SAFE DRINKING WATER ACT (SDWA)
  - Based on research, investigation and resulting evidence (both direct and circumstantial), Proposed Plaintiffs are informed and believe the following:
  - In the skies over California, including, without limitation, over Shasta, Placer, Siskiyou and Santa Cruz Counties, Violators are engaging in several geographically widespread aerosolization programs for various reasons including, inter alia, military purposes and purportedly to address climate change. Violators use jet aircraft (primarily governmental and military aircraft, but also private jets under government contract), to release substances into the atmosphere at altitude in the effort to create artificial cloud cover and to conduct experiments, both of which have an impact on the climate, the temperature and weather patterns.

The Programs are further described and delineated in Attachment 1 to this Notice.

#### C. TOXIC BASE MATERIAL POLLUTANTS COMPLAINED OF IN THIS NOTICE

- Proposed Plaintiffs presently understand that the Violators are using a variety of base materials for the aerosol releases. Specifically, the climate science community has stated that a preferred material is aluminum oxide because it can mix with atmospheric humidity to create artificial cloud cover that stays aloft for a long time because the particles are so small.
- A standard base material is likely coal fly ash, consisting of aluminum and other materials, which is waste product from the coal burning industry. It is plentiful and inexpensive. Proposed Plaintiffs are informed and believe that the coal burning companies have contracts with the US military for use in the Programs. Coal fly ash, along with the other base materials, is a "pollutant" under the CWA and has been recognized as such by the Courts and US EPA, as recently exemplified in US Department of Justice enforcement taken against Duke Energy in North Carolina for discharge of the pollutant coal fly ash into various water bodies protected by the Clean Water Act. See United States of America v. Duke Energy et al., Criminal Information Case 5:15-CR-00062, US District Court for the Eastern District of North Carolina, Western Division, filed 2/20/15.
- Specifically, CWA Section 502(6), 33 U.S.C. §1362(6), defines pollutant as follows:

The term "pollutant" means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial,

municipal, and agricultural waste discharged into water.

- Coal fly ash is, among other things, "solid waste," "incinerator residue" and "chemical wastes." See Attachment 2 for further description of the base material pollutants.
- Numerous patents exist for aerosol release technology. This technology utilizes dispersion methods into the atmosphere by jets to manipulate the climate. The base materials in such patents include "Welsbach materials and the oxides of metals which have high emissivity (and thus low reflectivities) in the visible and 8-12 micron infrared wavelength regions." US Patent No. 5003186 A (issued March 26, 1991). "Aluminum oxide (Al2 O3) is one metal oxide suitable for the purpose and which is relatively inexpensive." Id.

#### D. THE VIOLATORS AND THEIR MISCONDUCT

- The Violators consist of the DoD, USN, USAF, FAA, NOAA, NASA, and NWS. The DoD is involved because it coordinates and authorizes the activities of all divisions of the US military, including the USN and USAF. The USN and USAF have been tasked with primary responsibility for implementing the Programs with their military aircraft tanker jets. Proposed Plaintiffs are informed and believe that there are military bases used for the Programs in locations in and around California (as well as throughout the country), which include Travis Air Force Base (Fairfield, California), McChord Field (Pierce County, Washington), and Fallon Naval Air Station (Reno, Nevada).1
- The FAA, including its Western Region division in Redondo Beach, California, is involved in the unlawful discharges of pollutants because it has primary governmental authority to coordinate all commercial and military flights over California.
- The CWA requires that discharges of pollutants that reach waters of the US must have National Pollutant Discharge Elimination Permits (NPDES). The Violators do not have NPDES permits required by the CWA to conduct the discharge of Pollutants under the Programs. The Violators have never sought, much less obtained, the permits for the Programs required by the CWA and State law, including NPDES and Waste Discharge Requirement (WDR) Permits. The Violators have not prepared, nor have they conducted, the required federal National Environmental Policy Act (NEPA), 42 U.S.C. §4321 et seq. and State Environmental Impact Assessments and Statements nor the mandated programmatic review necessary for NPDES permits to even be considered. See California Environmental Quality Act Public Resources Code §21000 et seq. (CEQA).

<sup>&</sup>lt;sup>1</sup> Proposed Plaintiff Frank P. Livolsi, M.D., also a licensed pilot, has personally observed military personnel in HAZMAT suits loading canisters into USAF tankers at Travis Air Force Base.

- The EPA, the primary agency authorized and obligated to enforce the federal environmental laws, including the CWA and the SDWA, has turned a blind eye to the Programs, rather than require all actors involved in the Programs to comply with the environmental laws. The USCG likewise has responsibility under the CWA to enforce compliance in coastal and other waters under its jurisdiction. The Delinquent Regulators have not complied with their NPDES enforcement duties delegated by EPA as well as under State law, including the Porter-Cologne Water Quality Act.
- Such Delinquent Regulators as Redding Environmental Management have also allowed widespread contamination of California's drinking water, by failing to act on collected data showing that the Sacramento River and other US waters are heavily contaminated by the aerial spraying of base materials pollutants.
- Other state agencies have also turned a blind eye to water contamination that is
  most likely coming from the Programs. By way of example only, in 2002, without
  any rationale, the California Water Quality Control Board decided to stop testing
  for aluminum in California waters.
- Over the last several years, the named California agencies have had a blanket
  policy of not testing rainwater for toxic metals over the last several years. It is
  likely that such testing would have shown widespread unnatural spikes of
  aluminum, barium, strontium and other toxic substances. The most likely
  sources of such contaminants are the Programs.
- NOAA studies state that there are unprecedented levels of particulates of
  "unknown origin" in the upper atmosphere. The Programs have generated at
  least a portion of those particulates. John Daniel, a physicist at NOAA's Earth
  System Research Laboratory, found a definitive increase in stratospheric
  aerosols since 2000. "Stratospheric aerosol increased surprisingly rapidly in
  that time, almost doubling during the decade," Daniel said. The reasons for the
  10-year increase in stratospheric aerosols are not fully understood and are the
  subject of ongoing research, said coauthor Ryan Neely, with the University of
  Colorado and the Cooperative Institute for Research in Environmental Sciences
  (CIRES).
- Unless such activities are immediately put to a halt by agency enforcement, Proposed Plaintiffs will sue both the Violators and the complicit Delinquent Regulators to enjoin the continuation of aerial spraying under the Programs in violation of the CWA, the SDWA and other environmental laws.
- The discharge of metals and other base material pollutants under the Programs into the California waterways and public drinking water supplies has resulted in numerous and varied detrimental and often irreversible impacts on the health of citizens in a variety of settings. See Attachment 3 for a further explanation of such deleterious public health impacts.
- The public's air, soils, and waters are being systematically poisoned day in and day out by the highly toxic fallout from the Programs. The Programs have

resulted in severe damage to the environment, *inter alia*, in Shasta, Placer, Siskiyou and Santa Cruz Counties, posing a serious health threat to the population, and substantial damage to the economy.

#### E. THE UNPERMITTED PROGRAMS VIOLATE THE CLEAN WATER ACT (CWA)

The Federal Water Pollution Control Act is commonly known as the Clean Water Act (CWA). Pursuant to authorization provided by CWA Section 505(a)(1), 33 U.S.C. §1365(a)(1), the Proposed Plaintiffs provide notice that they intend to file a civil action in United States District Court against the Proposed Defendants for the unlawful discharge of pollutants in California, including Shasta, Placer, Siskiyou and Santa Cruz Counties, from the various enumerated point sources to waters of the US. Such discharges of pollutants directly to said water bodies and numerous unnamed tributaries and areas with storm water runoff, without any of the required NPDES Permits is in flagrant violation of CWA Section 301(a), 33 U.S.C. §1311(a) and CWA Section 402, 33 U.S.C. §1342, as well as in flagrant violation of applicable Effluent Guidelines and Water Quality Standards, Limitations and Requirements. Furthermore, the Proposed Plaintiffs also give notice of intent to file suit for violation of the CWA and the Porter-Cologne Water Quality Act provisions that regulate discharges to Publicly Owned Treatment Works including their management and pretreatment. See CWA §307(b) and (c); 33 U.S.C. §1317(b) and (c); California Water Code §13000 et seq.

#### 1. Unlawful Discharge of Pollutants

Violators do not possess the required NPDES permits as required by the CWA, making their discharges of pollutants to Waters of the United States illegal. These discharges are intentional, knowing, willful and wanton violations of law. Additionally, Proposed Defendants have further violated the CWA's storm water pollution provisions without benefit of any permit or authorizations. Such activities have taken proverbial "midnight dumping" to the new level of around the clock dumping.

#### 2. The Specific Violations by Proposed Defendants

- (a) The specific activities of violation are Violators' aerial releases and discharge of a variety of pollutants to Waters of the United States without federal and state permits, causing a violation of applicable water quality standards, waste discharge requirements, regulations and effluent limitations.
- (b) The specific regulations violated are those of the US EPA and of the State of California for the base materials and pollutants listed herein.
- (c) The specific standard, effluent and other limitations and orders violated are federal and California state water quality standards, requirements, effluent guidelines, orders and limitations, including but not limited to, those for aluminum, aluminum oxide, metals, strontium, mercury and barium.
- (d) Proposed Defendants are persons responsible for the alleged violations and are complicit in a variety of ways, including but not limited to, participation in the planning, routing and execution of aerial spraying operations, and by the direction and

participation in such unlawful discharges of pollutants to Waters of the United States without any CWA permit or authorizations, both point source and non-point source pollution. The above-named federal and state agencies are equally complicit in their collective failure to perform their non-discretionary duties to enforce the CWA and its state counterparts, including the Porter-Cologne Water Quality Act (California Water Code §13000 et seq.), the Safe Drinking Water and Toxic Enforcement Act and Public's Right to Know (Prop 65) (California Health & Safety Code §25249.5 et seq.) and the Toxic Substances Control Act (TSCA) (15 U.S.C. Ch. 53 §2601 et seq.). In addition, the FAA has unlawfully approved or ignored the airworthiness certification of aerial spraying devices and systems on discharging aircraft.

- (e) The locations of the alleged violations include Northern California, in particular but not limited to Shasta, Placer, Siskiyou and Santa Cruz Counties.
- (f) The dates of the alleged violations are that such discharges are ongoing, virtually on a daily basis, and have been going on for years. The alleged violations and discharges have been persistent and of long-standing nature since at least the 1980s when the CWA and SDWA were already in effect, and have been of a continuing and ongoing nature.
- (g) These incidents of effluent exceedences demonstrate a continuing likelihood that such violations will recur indefinitely unless dealt with quickly and appropriately.

#### F. RELIEF SOUGHT BY PROPOSED PLAINTIFFS

Upon completion of the sixty (60) day notice period, Proposed Plaintiffs will file citizens' suits pursuant to CWA Section 505(a), 33 U.S.C. §1365(a), against Proposed Defendants named above; the Violators for unpermitted discharges of pollutants, and the Delinquent Regulators for failure to take enforcement and discharge their non-discretionary duties to protect the environment mandated by the CWA. Proposed Plaintiffs demand that Violators immediately cease all such discharges which are unpermitted and unlawful. Proposed Plaintiffs will seek an order pursuant to 33 U.S.C. §1365(d) enjoining Violators' activities and an injunction ordering the above Delinquent Regulators to take enforcement action against said Violators for past and ongoing discharges, which are intentional, willful and in flagrant violation of the CWA.

Proposed Plaintiffs will also seek any other relief deemed just and appropriate by the Federal District Court, including reasonable costs, attorney and expert fees. Such suits and relief being sought will also include enforcement and injunctions to comply with the provisions of the CWA and the Porter-Cologne Water Quality Acts that regulate discharges to Publicly Owned Treatment Works including their management and pretreatment. See CWA Section 307(b) and (c); 33 U.S.C. §1317(b) and (c); and California Water Code §13000 et seq.

#### G. LEGAL STANDARDS AND VIOLATIONS OF THE CLEAN WATER ACT (CWA)

Congress enacted the CWA "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." CWA Section 301(a), 33 U.S.C. §1311(a), prohibits the discharge of pollutants into waters of the United States except when

authorized by an NPDES permit. Waters of the United States are defined by the CWA and US EPA regulations and include:

All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; All interstate waters including interstate wetlands; All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters; tributaries, the territorial sea; waste treatment systems, including treatment ponds or lagoons.

33 U.S.C. §1251 et seq.

Furthermore, the CWA and the Porter-Cologne Water Quality Act regulate discharges to Publicly Owned Treatment Works including their management and pretreatment. See CWA Section 307(b) and (c); 33 U.S.C. §1317(b) and (c); and California Water Code §13000 et seq.

#### H. THE UNPERMITTED PROGRAMS VIOLATE THE SAFE DRINKING WATER ACT AS WELL AS THE CLEAN WATER ACT AND STATE REQUIREMENTS FOR PUBLICY OWNED TREATMENT WORKS

#### 1. Specific Violations by Proposed Defendants

- (a) The specific activities of violation are aerial spraying and discharge of a variety of pollutants to Waters of the United States without federal and state permits, causing a violation of applicable water quality standards, permits, regulations and effluent limitations for the pollutants named herein.
- (b) The State and Regional Water Resources (Quality) Control Boards' failure to maintain the quality of drinking water sources, along with the EPA's failure to monitor this quality and enforce drinking water standards.
- (c) The following Public Water Systems and Operators, including the Counties of Shasta, Placer, Siskiyou and Santa Cruz, as well as Redding Environmental Management, Redding Public Works-Utilities, the Cities of Auburn and Redding, and Placer County Water Agency have violated their Water Supply Permits from the State of California and have also violated regulatory requirements. Such Public Water Systems and Operators have violated their permits as to water quality standards and treatment, have allowed numerous contaminants to enter their systems in unsafe amounts, and have failed to give immediate notice to the public of tainted and unsafe water quality. Such Public Water Systems and their Operators have also failed to follow their water quality monitoring plans, their operational plans and their Emergency Response Plans, and have failed to take corrective action. The State of California and its Division of Drinking Water have failed in their duties of monitoring, inspection and enforcement by allowing such permit violations and breaches of water quality to

continue. In addition, such authorities have failed to enforce applicable pretreatment standards, as well as regulations and permits regarding disposal of wastes and sewerage sludge.

- (d) The specific standards, limitations, permits and orders violated are those for federal and state water quality, including drinking water quality, and requirements and limitations for: aluminum, barite, selenium, strontium, mercury, environmental sulfates, black carbon, metallic aluminum, aluminum oxide aerosols and barium titanate.
- (e) The persons responsible for the alleged violations are the above-named Violators for their polluting activities, as well as the FAA for participation in the planning, routing and execution of aerial spraying operations by the direction and participation in such unlawful discharges of pollutants to Waters of the United States without any SDWA authorizations. The above-named federal and state entities, organizations and agencies are equally complicit in their collective failure to perform their non-discretionary duty to abide by and enforce the SDWA and its California counterparts, including the California Safe Drinking Water Act and the Porter-Cologne Water Quality Act and state regulations.
- (f) The locations of the alleged violations are throughout California, including but not limited to Shasta, Placer, Siskiyou and Santa Cruz Counties.
- (g) The alleged violations and discharges have been persistent and of long-standing nature since at least the 1980s when the CWA and SDWA were already in effect, and have been of a continuing and ongoing nature. The dates of the alleged violations are that such discharges are ongoing, virtually on a daily basis, and have been occurring for years.
- (h) The alleged violations also include non-compliance with the CWA and the Porter-Cologne Water Quality Act mandates regarding the regulation of discharges to Publicly Owned Treatment Works, including their management and pretreatment. CWA §307(b) and (c); 33 U.S.C. §1317(b) and (c); and California Water Code §13000 et seq.

#### I. LEGAL STANDARDS & VIOLATIONS OF THE SDWA, CWA AND THE PORTER-COLOGNE WATER QUALITY ACT

The Safe Drinking Water Act (SDWA) is the principal federal law in the United States intended to ensure safe drinking water for the public. Pursuant to the SDWA, the EPA is required to set standards for drinking water quality and oversee all states, localities, and water suppliers who implement these standards. *See* 2 U.S.C. Subchapter XII Safety of Public Water Systems, including SDWA §300f *et seq.*, and 40 CFR §§141-42.

The California State Water Resources Control Board and its Division of Drinking Water have failed to comply with and enforce the mandates of the federal and state Safe Drinking Water Acts. Furthermore, the CWA and the Porter-Cologne Water Quality Act regulate discharges to Publicly Owned Treatment Works, including their management and pretreatment. CWA §307(b) and (c); 33 U.S.C. §1317(b) and (c); and California Water Code §13000 et seq.

#### J. RELIEF SOUGHT BY PROPOSED PLAINTIFFS

Upon completion of the sixty (60) day notice period, the Proposed Plaintiffs will file citizens' suits pursuant to SDWA Section 1449(a)(1), 42 U.S.C. §300f *et seq.*, against Proposed Defendants named above, said Violators for violations, and named governmental agencies/entities for failure to take enforcement and discharge their non-discretionary duties for protection of the environment mandated by the SDWA. Proposed Plaintiffs demand that Violators immediately cease all violative discharges and comply with water quality standards, permits and permit requirements. If such violations do not immediately cease, Proposed Plaintiffs will seek an order pursuant to 42 U.S.C. §300f *et seq.* enjoining Violators' activities and ordering compliance, and an injunction ordering the above Delinquent Regulators to take enforcement action against said Violators for past and ongoing discharges and non-compliance which are intentional, willful and in flagrant violation of the SDWA. Proposed Plaintiffs will also seek any other relief deemed just and appropriate by the Federal District Court, including reasonable costs, attorney and expert fees.

# K. INJURIES TO PUBLIC HEALTH AND THE ENVIRONMENT CAUSED BY THE VIOLATIONS OF THE CWA AND SDWA

- 1. Pollution of Plaintiffs' drinking water and water sources, destruction of crops, trees, orchards and soils as well as widespread deforestation;
- 2. Elevated levels of poisonous contaminants in the blood of members of the public, including highly elevated levels of aluminum and other heavy metals;
- 3. Decreased precipitation and evaporation, drought and conflicts over water use, destruction of farmlands and vineyards, altered monsoon rains and winds, and destruction of the ozone layer;
- 4. Promotion of rain or snow in one area to the detriment of another;
- 5. Reduction of total amount of direct sunlight reaching the earth's surface;
- Increased air and water pollution, and acid rains with deleterious effects on various industries, including but not limited to, agricultural and seafood industries;
- Increase in acid rain from sulfur, aluminum oxide particles, gases or other compounds, causing adverse impacts on highly sensitive forest ecosystems;
- Negative impacts from sulfate, aluminum oxide particles, gases and/or other compounds used in aerosol spraying schemes, which fall from the atmosphere in various ways onto the land and ocean, and which contribute to ocean acidification and to adverse impacts on crop soils and built structures;
- Decreased effectiveness of such alternative forms of energy as solar panels, due to reductions in direct or diffuse sunlight, as well as decreased hydro and wind power;
- 10. Numerous other potential consequences and as yet unseen environmental harms from the production of air pollution and air contaminants.

# NOTICE IS HEREBY PROVIDED BY CERTIFIED MAIL TO ABOVE PROPOSED DEFENDANTS, BOTH VIOLATORS AND DELINQUENT REGULATORS.

Blackwill

Sincerely,

## Legal Alliance to Stop Geoengineering (LASG)

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#### Attachment 1 - Toxic Aerosol Discharge Programs

In the climate science community, aerosol programs are generally known as "stratospheric aerosol geoengineering" (SAG), "solar radiation management" (SRM) and "stratospheric aerosol injection" (SAI). SAG, SRM, SAI and other aerosolization programs are causing "global dimming" on a scale that can hardly be comprehended. Current figures are averaging in the 20% range globally, but in some areas, like Siberia, the total amount of sun that now reaches the ground is some 30% less than only a few decades ago. This reduction of sunlight further amplifies the currently occurring global droughts. Sunlight is a major component of evaporation. The Programs reduce atmospheric convection and thus overall wind flow, another component of evaporation. The science regarding aerosol clouds and their effect on wind is well documented. As convection is altered and reduced, so are wind patterns and flows.

Aerosolization particles are "light scattering" materials. They alter the light spectrum and likely cause many negative effects on all life forms, including effects that are not yet known. Blocking out the sun already is of extreme concern in terms of plant photosynthesis; but, considering that the light which does get through the toxic particulates is in an altered wave form, the concern is much greater still. Statistically, a large percentage of the US population is vitamin D deficient and this percentage has been increasing. "Global dimming" and the altered light form now reaching the surface of our planet likely contributes to this vitamin deficiency.

By way of example only, attached hereto are pictures of the discharges from the Programs in and around Shasta County, California.



Redding, California. Photo credit: Lori Bridgeford



Redding, California. Photo credit: GeoengineeringWatch.org



Shasta County, California. Photo credit: <u>GeoengineeringWatch.org</u> Shasta County, California. Photo credit: <u>GeoengineeringWatch.org</u>



Tioga Pass (Sierra Nevada mountains), California. Photo credit: Vince Hughes



Anderson, California. Photo credit: Krystal Fourzon Lane



Yosemite National Park, California. Photo credit: Ron Kauk



Tioga Pass (Sierra Nevada mountains), California. Photo credit: Vince Hughes

## Attachment 2 – Base Material Pollutants and Their Impacts on Water Quality and the Environment.

In his seminal paper, Evidence of Coal-Fly-Ash Toxic Chemical Geoengineering in the Troposphere: Consequences for Public Health. Int. J. Environ. Res. Public Health 2015, 12, 9375-9390, author J.M. Herndon concluded:

Coal fly ash is most likely the aerosolized particulate sprayed in the troposphere by tanker-jets for geoengineering, weather-modification and climate-modification purposes. That evidence is based upon the discovery that: (1) the assemblage of 8 elements in rainwater and in the corresponding experimental leachate are essentially identical. At a 99% confidence interval, they have identical means (T-test) and identical variances (F-test); and, (2) the assemblage of 14 elements in the HEPA dust and in the corresponding average un-leached coal fly ash are likewise essentially identical.<sup>2</sup>

Coal fly ash contains a variety of heavy metals and other toxic elements, including: aluminum, arsenic, barium, beryllium, boron, cadmium, chromium (III), chromium (IV), cobalt, lead, manganese, mercury, selenium, strontium, thallium, thorium, and uranium. *Id.* at 9385.

Snow samples from Mount Shasta are contaminated with aluminum. Pure white snow at 8,000-foot elevation on Mount Shasta had 61,100 parts per billion (ppb) of aluminum, over 4 times more than the mud beneath the snow and tens of thousands of times the expected maximum level in a snow sample. The samples also contained 83 ppb of barium and 383 ppb of strontium. The only route for these heavy metals to enter the precipitation system is from the aerosolized clouds. A rainwater test conducted in 2013 on Mount Shasta contained 13,100 ppb of aluminum, 130 ppb of barium and 138 ppb of strontium. These amounts are undrinkable by state standards, at 13 times the allowable limit. Lab reports of aluminum in precipitation range from ppb13,100 ppb correlated to jet spraying. Occasionally, measurements show no amount of these contaminants, showing that the levels vary according to outside influences, and also that there is no other nearby constant source of contamination. The Mount Shasta city water report indicates that aluminum, barium, strontium, lead, mercury, cadmium, arsenic, boron and chromium are not yet in city water.

Sugar Pine Canyon Creek (a tributary of Lake Shasta) in Redding, CA, has 4,600,000 ppb of aluminum (normal soil is 15,000 ppb) in the upper and lower stream. The soil in this area would typically have less than 40,000 ppb in an insoluble form.

The Delta smelt, a small fish on the federal endangered species list, found primarily at the mouth of the Sacramento River, has been found to have alarmingly elevated

<sup>&</sup>lt;sup>2</sup> J. M. Herndon has recently published an additional article on the Programs entitled *Human and Environmental Dangers Posed by Ongoing Global Tropospheric Aerosolized Particulates tor Weather Modification* (June 30, 2016, published in Frontiers in Public Health, June 2016, Volume 4, Article 139).

aluminum levels in its gills and tissue. This aluminum does not exist in the natural environment in free-form. Instead, it is falling into our lakes, rivers and streams from the Programs.

Per a test in Shasta County, near Redding, California, a double-lined pond (which completely prevents contact with soils), had 375,000 ppb of aluminum in the waters. Because the pond was lined, it collected precipitation; and the aluminum in the water cannot have come from the soil, but had to have fallen from the sky.

Former US Forest Service biologist Francis Mangles monitored an aquatic and terrestrial insect decline in parts of Northern California of as much as 90% in the last decade. The highly toxic heavy metal contamination that is cascading down in the air column must logically be considered a primary factor in this insect population crash. Trout are starving. In over 300 trout stomachs he examined in 2014, 95% had nothing in them. Further, as the insect populations have declined, bird populations have declined as well.

The PH value of soils in the forested regions of Shasta and Siskiyou County, California, have skyrocketed as much as 10 to 12 times their former PH value toward alkaline. This would be the expected result from the ongoing heavy metal contamination loading of the soils due to the atmospheric fallout.

Precipitation in storm water was tested in areas of California from 2005 to 2015. Aluminum levels from testing in 2013, for example, were as high as 13,100 ppb. Denser aerosol spray patterns resulted in proportionally higher increases of aluminum, barium and/or strontium.

Meadow pond sludge water from a pond at Mount Shasta had 12,000 mg/kg of aluminum even though the pond is fed by city spring water. The sample was exposed to the sky and was taken at the outlet of the pond. The Mt. Shasta City Park spring water had 1540 ppb of aluminum in 2009.

The trees throughout California, including in Shasta, Placer, Siskiyou and Santa Cruz counties, are dying from dehydration and from toxic soil containing unnatural levels of aluminum, barium and other contaminants. The toxic chemicals are falling on the trees and into the soil around them. The toxins are being absorbed into the trees from above ground and then through their root systems. "Bioavailable" aluminum is very harmful to most plant life, and its destructive impacts are well-documented. To protect themselves, the trees shut down nutrient uptake in an attempt to keep the toxins out. This results in starvation and slow death as well as mold and insect infestations. The toxic chemical fallout is also burning the trees. Tree die-off is happening in relatively pristine environments even on riparian shoreline where water is plentiful. President Obama recently visited Yosemite National Park and witnessed a high percentage of dead and declining trees.

All forms of life, including human, are ingesting the toxic chemical contamination in the drinking water supply and the atmosphere. In a recent study, for example, bumblebee pupae were found to have very high amounts of aluminum contamination, so high, that it suggests that aluminum-induced cognitive dysfunction is playing a role in the decline of bumblebee populations. Contamination from the Programs is affecting the web of life with detrimental impacts on soil, air, and all life. The Programs create environmental effects including, but not limited to, artificial drought and deluge, impacts on agriculture and crops, as well as illnesses related to aluminum toxicity.

Attachment 3 – Further Description of Illegal Discharge Activities and Their Concealment.

#### 1. Proposed Defendants Deny and Conceal the Programs

The Violators' first line of defense is to deny the existence of the Programs. They attempt to portray those who know the Programs exist as conspiracy theorists. Specifically, the USAF states on its website that it does not intentionally spray any chemicals into the atmosphere other than the low altitude spraying of certain pesticides and herbicides. Such statement does not address the intentional release of nano-particulates of aluminum oxide and other toxic metals into the atmosphere in furtherance of the Programs.

The Delinquent Regulators deny the existence of the Programs. The EPA, the primary agency authorized and obligated to enforce the federal environmental laws, states on its website that the Programs do not exist. The EPA website also hyperlinks to the USAF's denial of the Programs; the EPA simply accepts USAF's denial. The time is now for the EPA to do its job by requiring all actors involved in the Programs to comply with all federal environmental laws.

The Delinquent Regulators have also concealed widespread contamination of California's drinking water. Redding Environmental Waste, for example, represented this toxicity testing showed substantial spikes in aluminum in the headwaters of the Sacramento River, but has now suppressed such data. The Sacramento River is a primary source of drinking water for all California residents.

Redding Public Works has possession, control and custody of documents that show massive spikes in aluminum in the Sacramento River, a major of source of drinking water in California. The City of Redding is actively concealing such evidence.

Other state agencies have turned a blind eye to the water contamination that is most likely coming from the Programs. In the year 2002, for example, without any rationale whatsoever, the California Water Quality Control Board stopped testing for aluminum and California water. The California agencies appear to have a blanket policy of not testing precipitation for toxic metals. Such tests would have likely shown unnatural spikes in aluminum, barium and strontium. The only logical source of such contaminants is the Programs. Discovery will reveal the presumed communications between the Violators (and/or their affiliates) and the Delinquent Regulators regarding this blanket policy

In 2009, the California Energy Commission purchased a spectrometer for approximate y \$200,000 to analyze and measure UV light. The Commission states that the spectrometer has never been used and now cannot be located. No known readings have been released from this instrument to date.

NOAA studies show that there are unprecedented levels of particulates of "unknown origin" in the upper atmosphere. John Daniel, a physicist at NOAA's Earth System Research Laboratory, found a definitive increase in stratospheric aerosols since 2000. "Stratospheric aerosol increased surprisingly rapidly in that time, almost doubling during

the decade," Daniel said. The reasons for the 10-year increase in stratospheric aerosc are not fully understood and are the subject of ongoing research, said coauthor Ryan Neely, with the University of Colorado and the Cooperative Institute for Research in Environmental Sciences (CIRES). The Programs have generated at least a portion of those particulates.

The USAF's false statement on its website that it does not intentionally spray any chemicals into the atmosphere other than the low altitude spraying of certain pesticides and herbicides is belied by the US military's active interest in obtaining technology and expertise in weather modification for military purposes and otherwise. By way of example only, in August 1996, the USAF commissioned a report entitled "Weather as a Force Multiplier: Owning the Weather in 2025." The Executive Summary of the report states that:

In 2025, US aerospace forces can "own the weather" by capitalizing on emerging technologies and focusing development of those technologies to war-fighting applications. Such a capability offers the war fighter tools to shape the battle space in ways never before possible. It provides opportunities to impact operations across the full spectrum of conflict and is pertinent to all possible futures. The purpose of this paper is to outline a strategy for the use of a future weather-modification system to achieve military objectives rather than to provide a detailed technical road map.

The Delinquent Regulators must stop the Violators now. Otherwise, Proposed Plaintiffs will sue the Violators and the Delinquent Regulators to enjoin the Programs and enforce the environmental laws, including the CWA and the SDWA. The detrimental impacts from the Programs include, without limitation, contamination of the California waterways including the sources of drinking water for California residents

#### 2. Contaminants Are Affecting Human Health

Aluminum contamination is a major source of disease in human beings. There are unprecedented levels of aluminum in human blood. The free-floating nanoparticles of aluminum in our water supply, air and food are contributing to such diseases. In Redding, California, a neurologist has seen a disturbing spike in neurological disorders Sufficient evidence correlates aluminum contamination with neurological, lung, and bone diseases, particularly as autism and asthma in children, and as Alzheimer's disease in adults. Reports of breathing and neural problems have increased after aerosol spraying, especially in the elderly and in children. Autism levels are projected to jump to one in every two individuals by 2025.

Toxic nanoparticles are in the air. Such small particles are extremely damaging to the respiratory and neurological systems and cannot be filtered out with any readily available filtration mechanisms. Nanoparticles are so small that they penetrate straight through the lung lining and go straight into the blood stream. There, they can adhere to cell receptors like a plaque, slowly but surely damaging health and such bodily functions as the immune system. The particulates are also a platform upon which fungus proliferates. Scientific data suggests that in 70% of cases where infectious disease causes extinction of a type of animal or plant, an emerging species of fungus is behind the problem.

#### 3. The Unpermitted Programs Are Damaging the Health of the Global Environment

The protective layers of the atmosphere, most specifically the ozone layer and the ionosphere, are being shredded by the aerosols in the Programs. A compromised ozone layer renders all life on planet earth exposed to dangerous levels of radiation. The science on particulate clouds and their effect on the ozone layer is clear: particulate clouds destroy ozone. UV levels are already increasing dramatically around the globe.

Saturating the atmosphere with aerosol particulates diminishes and disperses rainfall. The excess of condensation nuclei causes moisture droplets to adhere to these nuclei and thus droplets do not combine and fall as precipitation, but continue to migrate in the form of artificial cloud cover, causing drought in areas and deluge in others. If the climate were only affected by an increase of CO2, the expectation would be a large increase in precipitation world-wide.

Our air, soils, and waters are being systematically poisoned day in and day out and in fact even sterilized by the highly toxic fallout from the Programs. The totality of damage already caused by this fallout can never be quantified.

#### 4. Conclusions

The Programs have resulted in severe damage to the environment, including but not limited to, the environments in Shasta, Placer, Siskiyou and Santa Cruz counties. The Programs have also resulted in a serious health threat to the population and substantial damage to the economy.

When the Programs are finally subjected to public and regulatory scrutiny, the Programs will not pass muster under the environmental laws, including the CWA and the SDWA. The scientific community has studied the Programs and has concluded that the risk-benefit does not favor the Programs.

The Board on Atmospheric Sciences and Climate of the National Research Council of the National Academies (NRC) issued a report in 2015 entitled "Climate Intervention." In that report, the NRC analyzed the issue of global warming and the experimental climate intervention programs involved in mitigating effects of global warming. The NRC concluded that the programs were not likely effective and were too risky. Among other things, the NRC stated, "Albedo modification at scales sufficient to alter climate should not be deployed at this time."

The NRC included a Committee on Geoengineering Climate that performed a "technical evaluation and discussion of impacts," which study was supported by the United States Department of Energy, NASA, NOAA, the US intelligence community, and National Academy of Sciences. While the NRC did not expressly address the Programs, its conclusion was that the risk-benefit of all climate modification programs must be investigated and must cease pending such investigation.